WHAT IS CLAIMED IS:

1. A signal-processing apparatus comprising:

candidate-detecting means for receiving an input signal including at least the first signal part and remaining signal parts in time-divided fashion, and for detecting, from the input signal, a candidate part of the first signal part in accordance with characteristic patterns of the input signal at prescribed time intervals;

characteristic-extracting means for extracting characteristic data indicating the probability of the first signal part from the candidate part or from signal parts preceding and following the candidate part; and

detecting means for detecting the first signal part in accordance with the characteristic data extracted by the characteristic-extracting means.

2. The signal-processing apparatus according to claim 1, wherein the detecting means includes characteristic-evaluating means for evaluating the possibility that the candidate part is the first signal part on the basis of the characteristic data, and determining means for determining the first signal part from the result of evaluation performed by the characteristic-evaluating means.

3. The signal-processing apparatus according to claim 1, wherein the detecting means includes determining means for determining, from the characteristic data, that the candidate part of the first signal part is identical to the first signal part which has been designated.

4. The signal-processing apparatus according to claim 1, wherein

the apparatus further comprises amplitude-detecting means for detecting an amplitude of the input signal,

wherein the candidate-detecting means detects a pattern that the amplitude of the input signal is smaller than a predetermined value at a predetermined time interval as one of the characteristic patterns.

5. The signal-processing apparatus according to claim 1, wherein

the apparatus further comprises a change-detecting means for detecting a change of the input signal,

wherein the candidate-detecting means detects a pattern that the change of the input signal is greater than a predetermined value at predetermined time intervals as one of the characteristic patterns.

6. The signal-processing apparatus according to claim 1, wherein

the apparatus further comprises uniform-component detecting means for detecting a unit period in which a prescribed component of the input signal falls within a prescribed range,

wherein the candidate-detecting means detects a pattern that the prescribed component of the input signal for the unit period at predetermined time intervals is uniform as one of the characteristic patterns.

7. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means includes an amplitude-detecting means for detecting an amplitude of the input signal, and extracts the amplitude of the signal parts

preceding and/or following the candidate as characteristic data indicating probability of the first signal part.

8. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means includes an amplitude-detecting means for detecting an amplitude of the input signal, and extracts the length of signal parts that the amplitudes of the signal parts preceding and/or following the candidate part are smaller than a predetermined threshold as characteristic data indicating probability of the first signal part.

9. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means includes correlation-detecting means for detecting the correlation of the input signal, and extracts the mutual correlation of the candidate part of the first signal part as characteristic data indicating probability of the first signal part.

10. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means includes amplitude-detecting means for detecting an amplitude of the input signal, and extracts a mean of amplitude in the candidate part of the first signal part as characteristic data indicating probability of the first signal part.

11. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means includes change-detecting means for detecting a change of the input signal, and extracts the number of times or frequency of changing

the input signal sharply in the candidate part as characteristic data indicating probability of the first signal part.

12. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means includes uniform-component detecting means for detecting a unit period for which a prescribed component of the input signal is uniform, and extracts the number of times or frequency at which the component of the input signal becomes uniform in the candidate part as characteristic data indicating probability of the first signal part.

13. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means includes mode-detecting means for detecting a mode of the input signal that can have a plurality of modes, and extracts the mode of the candidate part as characteristic data indicating probability of the first signal part.

14. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means extracts existence of the first signal part in signal that precedes or follows the candidate part as characteristic data indicating probability of the first signal part.

15. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means includes spectrum-detecting means for detecting a spectrum of the input signal, and extracts a change of the spectrum before or after the candidate part as characteristic data indicating probability of the first signal part.

16. The signal-processing apparatus according to claim 1, wherein the

characteristic-extracting means extracts channel information of the input signal selected a channel from a plurality of channels as characteristic data indicating probability of the first signal part.

17. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means extracts an area code of the input signal that can have any one of different area codes as characteristic data indicating probability of the first signal part.

18. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means includes a signal-identifying means for identifying a source of the input signal, and extracts a type of the source of the candidate part as characteristic data indicating probability of the first signal part.

19. The signal-processing apparatus according to claim 1, wherein the apparatus further includes a timer for measuring time and the characteristic-extracting means extracts the time at which the candidate part is input as characteristic data indicating probability of the first signal part.

20. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means includes genre-identifying means for identifying a genre of the input signal, and extracts the genres of the signal parts preceding and following the candidate part as characteristic data indicating probability of the first signal part.

21. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means includes a timer for measuring time and

genre-identifying means for identifying a genre of the input signal, and extracts, as characteristic data indicating probability of the first signal part, the genres of the signal parts preceding and following the candidate part and the time that has lapsed from the time of inputting the candidate part.

22. The signal-processing apparatus according to claim 1, wherein the characteristic-extracting means extracts, as characteristic data indicating probability of the first signal part, the number of times indicating that the amplitude of the input signal is smaller than a threshold value, the length of the input signal or the dispersion of amplitude of the input signal.

23. The signal-processing apparatus according to claim 2, wherein the characteristic-evaluating means evaluates the possibility that the candidate part is the first signal part, on the basis of characteristic data derived from multiplying weighting values to the characteristic data and adding the weighted characteristic data.

24. The signal-processing apparatus according to claim 2, wherein the characteristic-evaluating means uses a multi-layer perceptron to determine the possibility that the candidate part of the first signal part.

25. The signal-processing apparatus according to claim 1, further comprising means for recording and/or reproducing the input signal.

26. The signal-processing apparatus according to claim 1, further comprising means for editing the input signal.

27. The signal-processing apparatus according to claim 1, further comprising

means for skipping the first signal part.

28. The signal-processing apparatus according to claim 1, further comprising means for extracting only the first signal part.

29. The signal-processing apparatus according to claim 1, wherein the input signal consists of an audio signal and/or a video signal, and the first signal part is a commercial-message part.

30. A signal-processing method comprising:

receiving an input signal including at least the first signal part and remaining the signal parts in time-divided fashion, and for detecting from the input signal, a candidate part of the first signal part in accordance with characteristic patterns of the input signal at prescribed time intervals;

extracting characteristic data indicating the probability of the first signal part from the candidate part or from signal parts preceding and following the candidate part; and

detecting the first signal part in accordance with the characteristic data extracted by the characteristic-extracting means.

31. The signal-processing method according to claim 30, wherein the possibility that the candidate part is the first signal part is evaluated on the basis of the characteristic data, in order to detect the first signal part, and the first signal part is determined from the result of evaluating the possibility.

32. The signal-processing method according to claim 30, wherein from the

characteristic data it is determined that the signal in the candidate part is identical to the first signal part which has been designated.

33. The signal-processing method according to claim 30, wherein a pattern that the amplitude of the input signal is smaller than a predetermined value at a predetermined time interval is detected as one of the characteristic patterns.

34. The signal-processing method according to claim 30, wherein a pattern that the change of the input signal is greater than a predetermined value at predetermined time intervals is detected as one of the characteristic patterns.

35. The signal-processing method according to claim 30, wherein a pattern that the prescribed component of the input signal for the unit period at predetermined time intervals falls within a prescribed range is detected as one of the characteristic patterns.

36. The signal-processing method according to claim 30, wherein the amplitude of the signal parts preceding and/or following the candidate part are extracted as characteristic data indicating probability of the first signal part.

37. The signal-processing method according to claim 30, wherein the length of signal parts that the amplitudes of the signal parts preceding and/or following the candidate part are smaller than a predetermined threshold is extracted as characteristic data indicating probability of the first signal part.

38. The signal-processing method according to claim 30, wherein the correlation that the input signal has in the candidate part is extracted as characteristic

data indicating probability of the first signal part.

39. The signal-processing method according to claim 30, wherein a mean amplitude in the candidate part is extracted as characteristic data indicating probability of the first signal part.

40. The signal-processing method according to claim 30, wherein the number of times or frequency of changing the input signal sharply in the candidate part is extracted as characteristic data indicating probability of the first signal part.

41. The signal-processing method according to claim 30, wherein the number of times or frequency at which the prescribed component of the input signal becomes uniform in the candidate part is extracted as characteristic data indicating probability of the first signal part.

42. The signal-processing method according to claim 30, wherein a mode of the input signal that can have a plurality of modes is detected, and the mode of the candidate part is extracted as characteristic data indicating probability of the first signal part.

43. The signal-processing method according to claim 30, wherein existence of the first signal part in signal that precedes or follows the candidate part is extracted as characteristic data indicating probability of the first signal part.

44. The signal-processing method according to claim 30, wherein a spectrum of the input signal is detected, and a change of the spectrum before or after the candidate part is extracted as characteristic data indicating probability of the first signal

part.

45. The signal-processing method according to claim 30, wherein channel information of the input signal selected a channel from a plurality of channels is extracted as characteristic data indicating probability of the first signal part.

46. The signal-processing method according to claim 30, wherein an area code of the input signal that can have any one of different area codes is extracted as characteristic data indicating probability of the first signal part.

47. The signal-processing method according to claim 30, wherein a type of the source of the candidate part is extracted as characteristic data indicating probability of the first signal part.

48. The signal-processing method according to claim 30, wherein the time at which the candidate part is input is extracted as characteristic data indicating probability of the first signal part.

49. The signal-processing method according to claim 30, wherein the genres of the signal parts preceding and following the candidate part is extracted as characteristic data indicating probability of the first signal part.

50. The signal-processing method according to claim 30, wherein the genre of the signal parts preceding and following the candidates part and the time that has lapsed from the time of inputting the candidate part are extracted as characteristic data indicating probability of the first signal part, identifying a genre of the input signal..

51. The signal-processing method according to claim 30, wherein the number

of times indicating that the amplitude of the input signal is smaller than a threshold value, the length of the input signal or the dispersion of amplitude of the input signal are extracted as characteristic data indicating probability of the first signal part.

52. The signal-processing method according to claim 31, wherein the possibility that the candidate part is the first signal part is evaluated on the basis of characteristic data derived from multiplying weighing values to the characteristic data and adding the weighted characteristic data.

53. The signal-processing method according to claim 31, wherein a multi-layer perceptron is used to determine the possibility that the candidate part of the first signal part.